suitable substrate, the activation by said compound being in the absence of a 3-phosphoinositide.

- 17. (Amended) A polynucleotide encoding a polypeptide as defined in claim 15.
- 18. (Amended) A recombinant polynucleotide suitable for expressing a polypeptide as defined in claim 15.
- 20. (Amended) A method of making a polypeptide as defined in claim 15 the method comprising culturing a host cell which expresses said polypeptide and isolating said polypeptide.
- 26. (Amended) A preparation obtainable by the method of claim 24.
- 27. (Amended) A compound identifiable or identified by the method of claim 8.
- 32. (Amended) A kit of parts for identifying a compound wherein the kit comprises PDK1 and a plypeptide comprising the amino acid sequence Phe/Tyr-Xaa-Xaa-Phe/Tyr-Zaa-Phe/Tyr wherein Zaa represents a negatively charged amino acid residue.

Pursuant to 37 CFR §1.121(c)(1)(iii), a marked up version of these claims accompanies this amendment.

34. (New) A method of identifying a compound that is capable of mimicking the effect of a 3-phosphoinositide on the PDK1 or PDK2 activity of a PDK1 which has altered substrate specificity derivable by the method of claim 12, the method comprising determining whether said

compound activates said PDK1 so that it can phosphorylate a suitable substrate, the activation by said compound being in the absence of a 3-phosphoinositide.

- 35. (New) A method of identifying a compound that is capable of mimicking the effect of a 3-phosphoinositide on the PDK1 or PDK2 activity of a preparation according to claim 2, the method comprising determining whether said compound activates the preparation so that it can phosphorylate a suitable substrate, the activation by said compound being in the absence of a 3-phosphoinositide.
- 36. (New) A polynucleotide encoding a polypeptide as defined in claim 16.
- 37. (New) A recombinant polynucleotide suitable for expressing a polypeptide as defined in claim 16.
- 38. (New) A host cell comprising a polynucleotide as defined in claim 37.
- 39. (New) A method of making a polypeptide as defined in claim 16 the method comprising culturing a host cell which expresses said polypeptide and isolating said polypeptide.
- 40. (New) A method of identifying a compound that is capable of mimicking the effect of a 3-phosphoinositide on the PDK1 or PDK2 activity of a preparation according to claim 26, the method comprising determining whether said compound activates the preparation so that it can phosphorylate a suitable substrate, the activation by said compound being in the absence of a 3-phosphoinositide.